

Micro Insurance as a Dimension for Financial Inclusion in India through Jansuraksha Scheme: An Empirical Analysis of Statistical Evidence

Rajitha Ramachanran¹, Dr. Ps Anuradha²

¹Asst. Prof. Department of Commerce and Management, Presidency College, Hebbal, Bangalore

²Associate professor, Department of commerce, Christ University, India

Abstract: - Inclusive growth entails comprehensive growth, shared growth, and pro-poor growth. It lessens the fast growth rate of poverty in a country and upsurges the participation of people into the development of the country. Inclusive growth infers an impartial allocation of resources with benefits incurred to every section of the society. But the allocation of resources must be focused on the intended short and long term benefits of the society. Micro insurance is considered as an important instrument for inclusive growth. With the outset of the Pradhan Mantri Jan Dhan yojana when the government launched the insurance and pension schemes it was considered as a success for the upliftment of the poor and infusing insurance into the lives of the poor.

A key aspect of the interest in micro-insurance is to explore ways of significantly increasing the number of poor households belonging to various communities that have access to insurance while enhancing the benefits.

This paper is a study to understand how the Pradhan Mantri Suraksha Bima Yojana and Pradhan Mantri Jeevan Jyothi Bima yojana is considered as a success for the upliftment of the poor. It analyses how the progress of both these schemes in terms of the growth and progress has increased the inclusiveness of financial services like micro insurance has increased the outreach of these schemes. It is a statistical analysis of the secondary data on the gross enrollment and how it shows that micro insurance still be considered as a important dimension of financial inclusion.

Keywords: Micro insurance, Financial inclusion, schemes, Gross enrollment.

1. Introduction

Over two decades, India has implemented wide-ranging reforms that opened up the economy, dismantled the old licensing system and introduced competition into a number of sectors that had previously been dominated by public monopolies. This decisive action has helped the Indian economy to narrow the gap in living standards with advanced economies. Supported by further reforms, convergence accelerated in the 2000s as growth averaged over 8% a year, one of the strongest performances in the world. India's tryst with microinsurance and micro-pensions is older than most initiatives across the globe. Right from the days of public sector insurance (1960s-1999) through the periods of privatisation and regulation (post 2000), providing insurance for low-income segments has always remained a major agenda of discussion for the government and insurers alike. According to latest estimates, India accounts for more than 42% of global microinsurance coverage. In addition, several social microinsurance products already cover nearly 316 million Indians. This includes a range of life, health and agriculture insurance schemes aimed at low income segments with premiums fully subsidised by the government.¹ Moreover, 4.5 million people in the un-organised/informal workforce are covered

by NPS-Lite (a defined contribution (DC) micro-pension scheme with co-contributions from the government).

So when the current Government of India launched another host of insurance and pension schemes for the low income segments on May, 2015, it elicited both jubilation and scepticism. While the government continues with its marketing campaign and celebrations over impressive outreach, critics are arguing that these schemes are remodelled versions of their social insurance predecessors. Globally too, these schemes are yet to attract the attention of experts, who acclaimed the government a couple of months ago for opening of 161.4 million bank accounts under Pradhan Mantri Jan Dhan Yojana (PMJDY), the flagship financial inclusion programme.

1.2 Objectives of the study

1. To assess and compare the effectiveness of two schemes under Pradhan Mantri Jan Suraksha schemes with the help of the outreach and claim received.
2. To evaluate critically the penetration achieved so far through Pradhan Mantri Jan Suraksha schemes through claims received and disbursed

1.3 Definition

Micro-insurance as - the protection of low income households against specific perils in exchange for premium payments proportionate to the likelihood and cost of the risk involved. Micro insurance is considered to be an important financing tool to protect the poor from adverse financial consequences in the event of sicknesses or ill health.

1.4 Gap & Opportunity in Micro Insurance in India:

There is wide gap between the supply and demand for insurance for the poor and for rural areas. While targeting lower segment and rural areas require changes in product design, delivery models, poor infrastructure, information, awareness among people pose challenges for rapid growth of micro insurance in India. Targeting low income groups or poor requires necessary changes in product design and insurance models. As micro insurance expands, more products are being offered through a variety of insurer models and delivery channels. But the product development process is a complex and resource consuming activity which is too often skipped by commercial insurers. The approach of micro insurance supply is more product-driven — in the way microcredit was initially provided - than market driven. It might have contributed to increasing the gap between supply and demand, particularly in low segment insurance market.

The potential sample of micro-insurance schemes that met these criteria is not extensive. Many micro-insurance schemes are newly introduced or the products were yet to become popular by practice. They have found that worldwide most micro-insurers have focused on the simplest insurance products to manage, especially to cover credit life. After that, the volume of available micro-insurance reduces

as product management complexity increases. To some extent, the products most in demand in this under-served market, such as health insurance, are precisely those that are the least available for the poor. The draw backs for the spread of micro-insurance in backward & low-income communities are identified as:

1. Low enthusiasm of commercial insurers for the low income group;
2. Limitation of benefits of composite products;
3. Lack of promotion of informal or regulated insurance schemes;
4. Exclusions imposed like- for pre-existing conditions;

Four different models for delivering micro-insurance services to the targeted clientele:

Partner - Agent Model:

- Insurers utilize MFIs' delivery mechanism to provide sales and basic services to clients.
- There is no risk and limited administrative burden for MFIs.

Full Service Model:

- The provider is responsible for all aspects of product design, sales, servicing, and claims assessment.
- The insurers are responsible for all insurance-related costs and losses and they retain all profits.

Community Based Model:

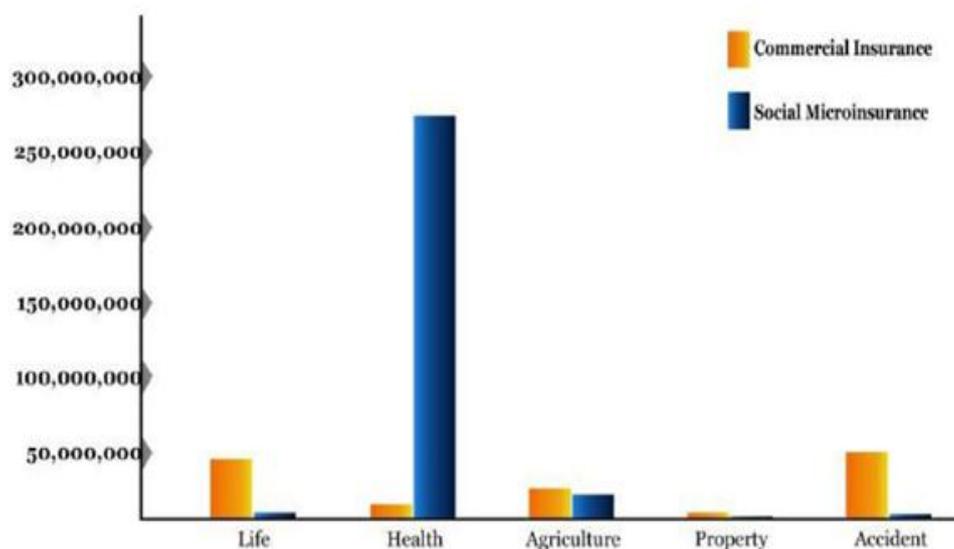
- The policy holders own and manage the insurance program, and negotiate with external health care providers.

Provider Model:

- The service provider and the insurer are the same, i.e., hospitals or doctors offer policies to individuals or groups.

Figure 1: Outreach of Micro insurance
Microinsurance and social Microinsurance outreach till 2013

Source: Landscape of Microinsurance in Asia and Oceania; Microsave MunichRe Foundation, 2014



Source: www.jansuraksha.scheme

1.5 THE BASICS OF MICRO INSURANCE IN INDIAN CONTEXT:

The Rural & back-ward community Population has to face many risks and hardships. The simple existence of risks inhibits their development initiatives. Despite all the economic boom that the country has been witnessing and the ever-increasing growth rate, there is no doubt that the incident of poor population is still very high. Percentages may indicate differently but considering the huge population (in India around 22-27% of different State's in India's Populations are living under „Below the Poverty Level“ (BPL) Category – indicates simply that the numbers are very huge). Poverty alleviation programs have always been a priority for the policy makers of the nation. To this end, several initiatives have been taken and subsequently empowerment programmes for the economically downtrodden sections of the society have supplemented these poverty alleviation programmes in order to bring them into the main stream. One should admit that several of these initiatives have yielded results and one gets to see a better standard of living, which is more visible in the countryside.

Micro-finance institutions have been doing a great job towards strengthening the cause of poverty alleviation. Apart from active lending, some of the micro-finance organizations also provide other services that help in productivity enhancement and business development. All this has helped the economically downtrodden sections, especially in the rural areas, to work in a given direction and raise themselves economically. The success of the Self Help Groups (SHGs), especially in some pockets of India, has proved that given a proper direction, even the bottom-most layers of the society can respond positively to the needs of time. It would not be an exaggeration to mention that several of these SHGs have brought in a silent revolution in the field of rural economics.

India's tryst with microinsurance and micro-pensions is older than most initiatives across the globe. Right from the days of public sector insurance (1960s-1999) through the periods of privatisation and regulation (post 2000), providing insurance for low-income segments has always remained a major agenda of discussion for the government and insurers alike. According to latest estimates, India

accounts for more than 42% of global microinsurance coverage. In addition, several social microinsurance products already cover nearly 316 million Indians. This includes a range of life, health and agriculture insurance schemes aimed at low income segments with premiums fully subsidised by the government.¹ Moreover, 4.5 million people in the un-organised/informal workforce are covered by NPS-Lite (a defined contribution (DC) micro-pension scheme with co-contributions from the government).

1.6 DEFINITE INITIATIVES TAKEN BY OUR RESPECTED PRIME MINISTER, Mr. Narendra Modi:

"Pradhan Mantri Jan-Dhan Yojana (PMJDY)" is ensuring access to various financial services like availability of basic savings bank account, access to need based credit, remittances facility, insurance and pension to the excluded sections i.e. weaker sections & low income groups. This deep penetration at affordable cost is possible only with effective use of technology Prime minister Sri Narendra Modi declared on the 15TH August 2014 the scheme of „Jan dhan yojna“ for opening bank account for all the individuals especially in rural areas all over the country to facilitate government subsidies and other transactional facility to all citizen individually. The scheme offers 1 lakh. At the outset, let us clarify that the new schemes, collectively called *Jansuraksha Schemes*, are not social security or social insurance schemes in the strict definition of the term. The differentiation between commercial/conventional insurance and social insurance or social security lies in:

- who pays the premium; and
- who carries the risk (whom the premium is paid to).

Social security schemes are those where government underwrites the risk itself, without involvement of any insurance entity. Disaster relief, public health schemes (e.g. National Rural Health Mission) and employment guarantees (e.g. MNREGA) are examples of social security schemes, where the government directly underwrites the risks from its exchequer. In social insurance or social microinsurance schemes, on the other hand, To assess whether these schemes are indeed offering anything new and innovative, let us start by understanding what they offer.

Table 1: Comparison on the schemes offered under Pradhan Mantri Jan Dhan Yojana:

Name of the Product/Scheme	Benefit	Sum Assured/ Benefit Amount (INR)	Premium (INR)	Outreach (to 14th Aug, 2015)
Pradhan Mantri Suraksha Bima Yojana (PMSBY)	Personal Accidental	200,000 (USD3,240)	12 per year	81.24million
	Death	200,000 (USD3,240)	(USD0.19)	
Permanent Disability (loss of both eyes, arms or legs)				

Partial Disability (loss of one eye, arm or leg)		100,000 (USD1,620)		
Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY)	Death (any cause)	200,000 (USD3,240)	330 per year (USD5.35)	
Atal Pension Yojana (APY)	Monthly Pension from the age of 60	1,000-5,000, depending on contribution	From 42 per month (USD0.68) [for persons starting at 18 years with minimum pension of INR1,000]	0.65million

2 Data and Methodology

The present study is based on secondary data collected from data.gov database and ministry of finance website. The relevant secondary data is collected for a period of 10 months from September 2015 to May 2016.

The study period is important since the schemes were issued in May 2015, considering the growth of the scheme shows the relevance of the data.

2.1 Data Analysis and Results

The regression equation is written as $Y=a+bX+e$ Y is the value of the dependent variable (Y), what is being predicted or explained as a or Alpha, a constant which equals the value of Y when the value of X= 0 b or Beta, the coefficient of X; the slope of the regression line; how much Y changes for each one unit change in X.

$$C=a+bGO=e(1)$$

X is the value of independent variable, what is predicting or explaining the value of Y. So here (Y) is the dependent variable claim received, is constant, b changes and X is gross enrollment.

The following research hypothesis have been taken as the assumptions:

- H01: There is no significant relation between gross enrollment and claims received.
- H02: There is a significant relation between claim received and claims disbursed.

The gross enrollment of both schemes Pradhan mantri suraksha bima yojana and Pradhan mantri jeevan bima yojana are independent variables and claims received, claims disbursed are dependent variables. Since the success of insurance policies are considered with the gross enrollment and claims received. Hence the null hypothesis is there is no significant relations between gross enrollment and claims received.

Table 2: Data regarding Gross enrollment and claim received

	Gross Enrolment	Claim received	Claim disbursed
As on. 01.06.2016	12.41	34419	29376
As on. 01.05.2016	12.34	33586	26462
As on 01.04.2016	12.29	28364	22166
As on 01.03.2016	12.27	26108	15537
As on 01.02.2016	12.22	21428	10726
As on 01.01.2016	12.15	13901	7751
As on 01.12.2015	12.01	10973	4843
As on 01.11.2016	11.71	6994	2783
As on 01.10.2016	11.53	4307	1407
As on 01.9.2016	11.02	2239	536

Source: data.gov

- H01: There is no significant relation between gross enrollment and claims received.

Table 3: Regression analysis between gross enrollment and claims received

<i>Regression Statistics</i>	
Multiple R	0.864448
R Square	0.74727
Adjusted R Square	0.711166
Standard Error	6095.054
Observations	9

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	7.69E+08	768908928.6	20.69759	0.002637791
Residual	7	2.6E+08	37149678.2		
Total	8	1.03E+09			

Table 3 indicates R and R square values. R explains simple correlation and the value is 0.864 which indicates high degree of correlation between gross enrollment and claims received which indicates that if gross enrollment increases, the claims received will also increase. R square explains total variation present in dependent variables, claims received, which can be explained by the independent

variable, gross enrollment. In this model 0.764, since not a major variation can be explained properly. Significant F change is less than 0.5 at the significant level of 5 % which indicates that an increase or decrease in gross enrollment would affect claims received.

- H02: There is no significant relation between claims disbursed and claims received

Table 4: Regression analysis between claims received and claims disbursed

<i>Regression Statistics</i>	
Multiple R	0.974588
R Square	0.949822
Adjusted R Square	0.942653
Standard Error	2234.92
Observations	9

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	661831890.3	6.62E+08	132.5024023	8.40229E-06
Residual	7	34964069.73	4994867		
Total	8	696795960			

Table 4 indicates R and R square values. R explains simple correlation and the value is 0.974 which indicates high degree of correlation between claims received and claims disbursed which indicates that if claims received increases, the claims disbursed will also increase. R square explains total variation present in dependent variables, claims

received, which can be explained by the independent variable, gross enrollment. In this model 0.949, since not a major variation can be explained properly. Significant F change is less than 0.5 at the significant level of 5 % which indicates that an increase or decrease in claims received would affect claims disbursed.

2.2 Trend Analysis of the progress of Schemes

Table 5: Trend Analysis of Pradhan Mantri Jeevan Jyothi Bima Yojana

Gross enrollment %		
01.05.2016	9.45	100
01.04.2016	9.41	99.55
01.03.2016	9.37	99.15
01.02.2016	9.36	98.99
01.01.2016	9.33	98.74
01.12.2015	9.28	98.19
01.11.2016	9.17	97.03
01.10.2016	8.89	94.06
01.9.2016	8.75	92.58
01.08.2015	8.30	87.82

Figure 3: Growth of Pradhan Mantri Suraksha Bima Yojana

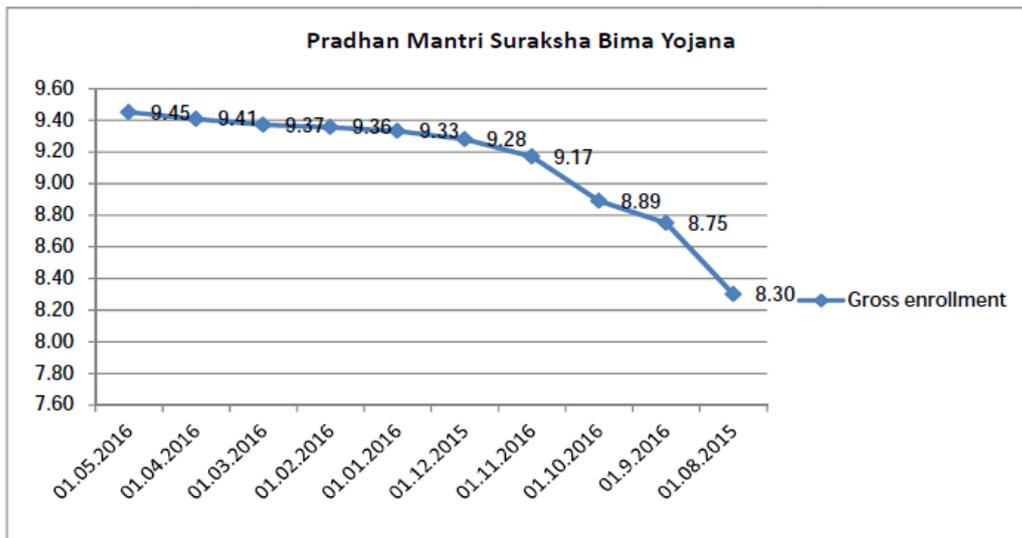
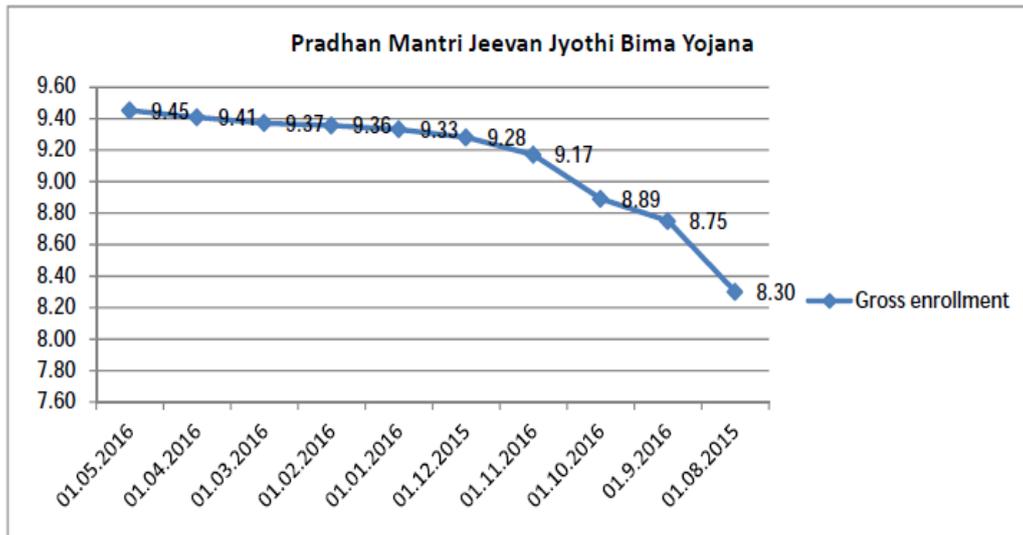


Table 6: Trend Analysis of Pradhan Mantri Jeevan Jyothi Bima Yojana

Gross enrollment %		
01.05.2016	2.96	100
01.04.2016	2.93	98.99
01.03.2016	2.92	98.65
01.02.2016	2.91	98.31
01.01.2016	2.89	97.64
01.12.2015	2.87	96.96
01.11.2016	2.84	95.95
01.10.2016	2.82	95.27
01.9.2016	2.78	93.92
01.08.2015	2.72	91.89

Figure 4: Growth of Pradhan Mantri Jeevan Jyothi Bima Yojana



3 Findings and Discussion

As per the regression analysis since there are no significant difference gross enrollment of policies have increased every month and claim received also shows the progress of the both the schemes. If there is an increase in gross enrollment and claim received it shows the outreach of both schemes within the short period of time.

Claim received and claim disbursed are positively affected which can be evaluated and assessed as an increase in the insurance claim. The schemes are showing the outreach and shows the impact of the scheme effectively disbursed the amount.

Trend analysis shows the impact and outreach of the analyse from 8.30 millions to 9.45 millions in a span of eight months which shows the progress and effectiveness of the scheme towards financial inclusion, but as against pradhan mantri jeevan jyothi bima yojana is not a satisfactory level stil, which is not satisfactory because ultimately, the goal of providing basic insurance schemes. After six months the increase is more than 10% increase for pradhan mantri suraksha yojana.

3.1 Limitation of the study and Scope for further research

This study is confined only to an analysis of increase/decrease in responsible factors towards mciro insurance as a study on financial inclusion with respect to PMDJY. The impact of the study is a short run analysis only because the before and after period is less than one year.

This study may act as a critical review for further research regarding analyzing the impact of the scheme pre and post analysis. Further, this study will be helpful to those researchers who would like to measure the intensity/degree of micro insurance as a financial inclusion.

3.2 Implications and Conclusion

Expansion of the scheme will increase the number of the gross enrollment and will help the poor to manage volatility in cash. Researches have proved that availability of scheme has an positive impact on accessing financial instruments like insurance. Therefore, expansion and development should be an important parameter to achieve the financial inclusion.

Awareness and increase in scheme are important aspects towards shows that more number of poor people would also be benefited, but also a good number of poor people who are unable to save such amount for poor people who are unable to save such an amount for unforeseen situations like death and disability.

Status of scheme after the issue show a significant improvement, which reveals that PMJDY increases the depth of micro insurance scheme. Claim received and claim disbursed would be helpful to improve the socio economic status of the economy as well as of the marginalized people of the society.

REFERENCES

- [1] Adriana Magdas (2012), MI: creation of a roadmap to full financial inclusion, working paper 20. International Labour Organisation.
- [2] Akila Prabhakar (2010). Micro Insurance: The Risk Reward Spectrum in India. Thesis submitted in partial fulfillment to Leonard N Stern School of Business, New York.
- [3] Amos Gitau Njunguna (2013). Risk Management Practices; A survey of Micro Insurance Service providers in Kenya.
- [4] Amruthavarshini V and Suresh BH. Penetration of Micro Insurance- A study. Global Research analysis Vol 2

- [5] Basanta K Sahu (2011). Micro Insurance in India. Outreach and Efficacy. Centre for Micro finance Research, Bankers Institute of Rural Development (BIRD).
- [6] Craig Churchill (2002). Trying to Understand the Demand for Micro Insurance. Journal of International Development. Vol 14. pg 381-382
- [7] D Srijanani (2013). MI in India: A safety net for the poor. International Journal of Management and Business Studies. Vol 3. Issue Jan- Mar 2013
- [8] Christian Biener & Martin Eling (2012). Insurability in MI Markets. An Analysis of Problems and Potential Solutions. The Geneva Paper 37. International Association for the study of Insurance Economics.
- [9] Craig Churchill (2002). Trying to understand the demand for MI. Journal of International Development. Vol 14
- [10] Daniel J Clarke and Dermot Grenham. (2013). Micro Insurance and Natural Disasters: Challenges and Options. Environment Science and Policy Vol 27. Pgs 589-599
- [11] Ernst Spaan, Judith Matheseen, Noor Tomp. (2012). The Impact of Health Insurance in Africa and Asia: a systematic review. Bulletin of WHO.
- [12] N.N Mohapatra and Pankaj kumar (2013). MI: Pillar of Financial inclusion. Journal of Financial research. Vol 5.
- [13] PP Singh and Shwetha Miglani (2011). MI schemes: Awareness and Future prospects among labour class. Institute of Management Technology Conference on inclusive growth and sustainable growth.
- [14] Rajeev Ahuja and Basudeb Guha. Working paper 162 in Indian Council for Research on International Economic Relations on Micro insurance in India: Trends and Strategies for further extension.
- [15] Ramakrishnan H Dr (2010). The legal Environment of Micro Insurance and Micro Finance in India: Some issues. Asia Pacific Journal of Research and Management Vol IV
- [16] Zachary Sherman (2010). Micro Insurance: An Effective Risk management tool for poor. Submitted for partial requirement of degree.